

## POST OPERATIVE SURGICAL COMPLICATION OF INGUINAL HERNIA IN CHILDREN

**GULAMNABI & V.S. SHANKREGOWDA**

*Assistant Professor Department of Surgery, Dr. B.R. Ambedka*

*Medical College and Hospital, Bangalore, Karanataka, India*

### ABSTRACT

*On prospective basis the researchers has identified an inguinal hernia can develops a portion of the intestine, along with fluid, bulges through the muscle of the abdominal wall ie, it was exhibits at birth. However, most inguinal hernias event happen because due to an opening in the muscle wall does not close as it should before birth of baby. A total 60 known cases of hernia was considered for the study informed consent obtained from the patient care taker. All patients meet inclusion and exclusion criteria, inclusion; the children age group between 1-10 years, irrespective gender, exclusion; congenital anomalies, CVD risk, HIV infected and terminal illness patients excluded from the study. The entire confirmatory test was done at our hospital in accordance with SOP. The incidence of inguinal hernia is approximately 3-5% in term infants and 13% in infants born at <33 weeks of age. Mean age was found to be 12 years with SD 1.96.> 12 years of age group children is more associated and exposed to hernia complications. The summing of results concludes that early surgical intervention is enabling to decline the incidence rate of hernia in younger aged children. Eventually the present study would helps to clinician for early diagnosis and taking proper surgical intervention in exposed population*

**KEYWORDS:** *Inguinal Hernia, Surgical Intervention, Congenital Anomalies & Children*

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### INTRODUCTION

On prospective basis the researchers has identified an inguinal hernia can develops a portion of the intestine, along with fluid, bulges through the muscle of the abdominal wall ie, it was exhibits at birth. However, most inguinal hernias event happen because due to an opening in the muscle wall does not close as it should before birth of baby. The bulge in the groin might only be noticed when the child is crying, coughing or staining during a bowel movement or the event might be appear when the child to be at larger during these times. Furthermore the new born who gave inguinal hernia incidence was seen in male children. The main symptoms of a hernia are a bulge in the groin or scrotum; may form over a period of weeks or months; usually painless, but can be painful; swelling or burning in the area of the hernia; sudden pain, nausea, and vomiting, which are signs that a part of the intestine may have become trapped in the hernia. Whereas, hernia usually will needs to be surgically repaired to prevent intestinal damage and further complications were seen in younger aged children. The surgical points have seriously intervened about an hour and is usually an outpatient procedure Many study reported for pre and post operative complications at global level. However in Indian Context there is limited literature will lead to discuss the issues on the hernia complications is due to plausible literature. in this context the present study aims to know the incidence and attempt to address the pre and post operative complications.

## MATERIALS AND METHODS

A total 60 known cases of hernia was considered for the study informed consent obtained from the patient care taker. All patients meet inclusion and exclusion criteria, inclusion; the children age group between 1-10 years, irrespective gender, exclusion; congenital anomalies, CVD risk, HIV infected and terminal illness patients excluded from the study. The entire confirmatory test was done at our hospital in accordance with SOP. Collected data was analysed by using SAS 6.50 version statistical software, paired t test and descriptive test statistics was used to draw the significant inference.

## RESULTS

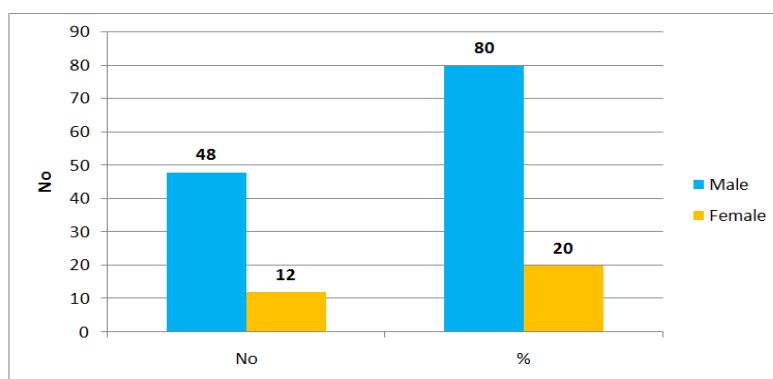


Figure 1: Gender Distribution of Hernia Affected Children

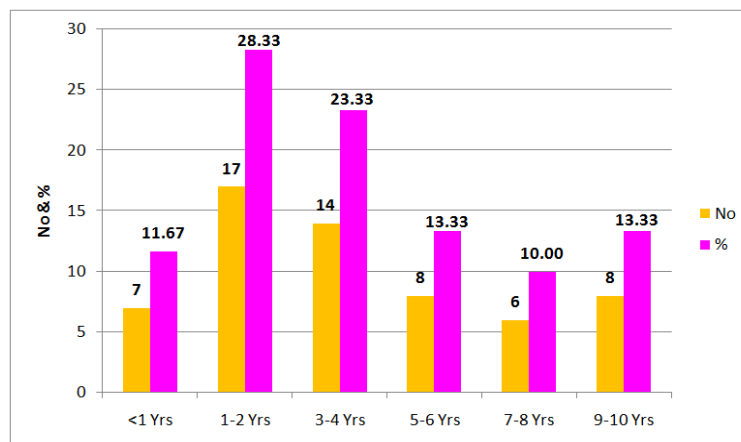


Figure 2: Age Wise Distribution of Hernia Affected Children

Table 1: Complication Status of Children after Surgery

| Complication      | Male                 | Female    | Total     |
|-------------------|----------------------|-----------|-----------|
| Yes               | 10                   | 2         | 12        |
| No                | 38                   | 10        | 48        |
| <b>Total</b>      | <b>48</b>            | <b>12</b> | <b>60</b> |
| <b>Chi-Square</b> | <b>60.32(p=0.00)</b> |           |           |

Inguinal hernia were commonly seen in children's, the affected population should requiring surgical repair in the paediatric age group of 5-12 years. In addition to the incidence of inguinal hernia has approximately fetches 3-5% in term infants and 13% in infants born at the gestational age <33 weeks. Inguinal hernias acquainted in both term and preterm infants are commonly repaired shortly after diagnosis to avoid incarceration of the hernia. Similarly, the lack of definitive data, optimal timing for repair of inguinal hernias in infants remains very debatable issue. This report was reviewed by the

too many authors; they have documented embryology and natural history of inguinal hernias as well as published data regarding the timing and approach to inguinal hernia repair in infants.

**Table 2: Sign and Symptoms of Hernia in Children**

| Signs and Symptoms | No | %      | P-Value |
|--------------------|----|--------|---------|
| Scrotum            | 12 | 20.00  | 0.000   |
| Painful            | 35 | 58.33  | 0.000   |
| Swelling           | 60 | 100.00 | 0.000   |
| Burning            | 42 | 70.00  | 0.001   |
| Sudden pain        | 60 | 100.00 | 0.000   |
| Nausea,            | 48 | 80.00  | 0.002   |
| Vomiting           | 37 | 61.67  | 0.001   |
| Painful+swelling   | 58 | 96.67  | 0.001   |
| Nausea+vomiting    | 48 | 80.00  | 0.000   |

**Table 3: Post Operative Complications of Hernia**

| Complications                                   | No        | %         | Hazard Rate | P-Value |
|---|-----------|-----------|-------------|---------|
| Pain it will not go away                        | 2         | 3.33      | 0.89-0.92   | 0.12    |
| Pin that gets worse                             | 1         | 1.67      | 0.54-0.62   | 0.22    |
| A fever >1010F 380c                             | 1         | 1.67      | 0.55-0.47   | 0.32    |
| Vomiting  | 4         | 6.67      | 0.74-0.82   | 0.02**  |
| Nausea  | 2         | 3.33      | 0.62-0.75   | 0.18    |
| Swelling, redness bleeding                      | 1         | 1.67      | 0.54-0.62   | 0.63    |
| Continuous abdominal pain                       | 1         | 1.67      | 0.52-0.69   | 0.19    |
| No Bowel movement 2 to 3 days after the surgery | -         |           |             |         |
| <b>Total</b>                                    | <b>12</b> | <b>20</b> |             |         |

## DISCUSSIONS

Many literature (1,2,3) showed an inguinal hernia repair was more associated with pre and post operative complications viz., hernia recurrence, vas deferens injury and testicular atrophy the rate of which vary from 1-8% in Asian Continent and latter part of the country. Since, long term complications includes chronic and infertility in adulthood and younger aged population. Moss et al., opined that low recurrence and complications rates up to five years after surgical repair in infants younger than two months of age were seen in population based study. Conversely, a retrospective analysis by Barired et al., revealed that, the higher rate of complications in infants who were 43 weeks corrected gestational age (GA) or younger compared younger individuals with those who underwent repair at an 15 years time interval. They were speculated that the greater friability of the hernia sac in former preterm infants predisposes to repair failure.

## CONCLUSIONS

The summing of results concludes that early surgical intervention is enabling to decline the incidence rate of hernia in younger aged children. Eventually the present study would helps to clinician for early diagnosis and taking proper surgical intervention in exposed population

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